

Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An adjustable length gas spring, comprising

- a casing ~~(2)~~ which has a central longitudinal axis ~~(8)~~ and is filled with a pressure fluid;
- a guide and seal unit ~~(7; 7b)~~ which closes the casing ~~(2)~~ at a first end ~~(6)~~ thereof;
- a piston rod ~~(9)~~ which has an outer end ~~(10)~~ and is extended through, and sealed towards, the guide and seal unit ~~(7; 7b)~~ out of the first end ~~(6)~~ of the casing ~~(2)~~,
the piston rod being extendible relative to the casing;
- a piston ~~(13)~~ which is guided in, and sealed towards, the casing ~~(2)~~ and connected with the piston rod ~~(9)~~;
- a first sectional casing chamber ~~(16)~~ which is formed between the piston ~~(13)~~ and the guide and seal unit ~~(7; 7b)~~;
- a second sectional casing chamber ~~(17)~~ which is defined by the piston ~~(13)~~ and faces away from the first sectional casing chamber ~~(16)~~;

- a valve ~~(21)~~ which is disposed in a vicinity of the piston ~~(13)~~ for interconnection of the sectional casing chambers ~~(16, 17)~~,

-- the valve ~~(21)~~ having a valve pin ~~(25)~~, which is displaceable along the central longitudinal axis ~~(8)~~, for actuation of the valve ~~(21)~~ from outside the casing ~~(2)~~; and

- at least one spring element ~~(48, 48a, 48b, 48e)~~,

-- which is disposed between the piston ~~(13)~~ and the first end ~~(6)~~ of the casing ~~(2)~~,

-- which encircles the piston rod ~~(9)~~,

-- which supports itself on a side opposite the guide and seal unit ~~(7, 7b)~~, and

-- which springily counteracts any extension of the piston rod relative to the casing ~~(9)~~ for at least part of a length of extension.

2. (Currently Amended) A gas spring according to claim 1, wherein the at least one spring element ~~(48, 48a, 48b, 48e)~~ comprises at least one saucer spring ~~(50)~~.

3. (Currently Amended) A gas spring according to claim 2, wherein the at least one saucer spring element ~~(48, 48a, 48b, 48e)~~ comprises an assembly of saucer springs ~~(50)~~.

4. (Currently Amended) A gas spring according to claim 3, wherein the assembly of saucer springs ~~(50)~~ is confined by an encapsulation ~~(52)~~.

5. (Currently Amended) A gas spring according to claim 1, wherein the at least one spring element ~~(48, 48a, 48b, 48c)~~, upon extension of the piston rod ~~(9)~~, is supported towards the guide and seal unit ~~(7)~~ in the direction of extension ~~(37)~~.

6. (Currently Amended) A gas spring according to claim 5, wherein the at least one spring element ~~(48, 48a, 48b, 48c)~~ is disposed in the first sectional casing chamber ~~(16)~~.

7. (Currently Amended) A gas spring according to claim 1, wherein the guide and seal unit ~~(7b)~~ is displaceable in the casing ~~(2)~~.

8. (Currently Amended) A gas spring according to claim 7, wherein displaceability of the guide and seal unit ~~(7b)~~ counter to the direction of extension ~~(37)~~ is defined by a stop ~~(43)~~.

9. (Currently Amended) A gas spring according to claim 7, wherein the at least one spring element ~~(48b, 48e)~~ is supported towards the guide and seal unit ~~(7b)~~ counter to the direction of extension ~~(37)~~.

10. (Currently Amended) A gas spring according to claim 1, wherein an energy accumulator is provided between the second sectional casing chamber ~~(17)~~ and ~~the~~ a closed second end ~~(3)~~, opposite the first end ~~(6)~~, of the casing ~~(2)~~.

11. (Currently Amended) A gas spring according to claim 1, wherein a gas-filled compensation chamber ~~(20)~~ is provided between the second sectional casing chamber ~~(17)~~ and ~~the~~ a closed second end ~~(3)~~, opposite the first end ~~(6)~~, of the casing ~~(2)~~.

12. (New) An adjustable length gas spring,
comprising

- a casing which has a central longitudinal axis
and is filled with a pressure fluid;

- a guide and seal unit which closes the casing
at a first end thereof;

- a piston rod which has an outer end and is extended through, and sealed towards, the guide and seal unit out of the first end of the casing, the piston rod being extendible relative to the casing;

- a piston which is guided in, and sealed towards, the casing and connected with the piston rod;

- a first sectional casing chamber which is formed between the piston and the guide and seal unit;

- a second sectional casing chamber which is defined by the piston and faces away from the first sectional casing chamber;

- a valve which is disposed in a vicinity of the piston for interconnection of the sectional casing chambers,

- the valve having a valve pin, which is displaceable along the central longitudinal axis, for actuation of the valve from outside the casing; and

- at least one spring element,

- which is disposed in the first sectional casing chamber between the piston and the guide and seal unit,

- which encircles the piston rod,

- which supports itself on a side opposite the guide and seal unit, and

-- which springily counteracts any extension of the piston rod relative to the casing for at least part of a length of extension.

13. (New) A gas spring according to claim 12, wherein the at least one spring element comprises at least one saucer spring.

14. (New) A gas spring according to claim 13, wherein the at least one saucer spring comprises an assembly of saucer springs.

15. (New) A gas spring according to claim 14, wherein the assembly of saucer springs is confined by an encapsulation.

16. (New) A gas spring according to claim 12, wherein the at least one spring element, upon extension of the piston rod, is supported towards the guide and seal unit in the direction of extension.

17. (New) A gas spring according to claim 12, wherein an energy accumulator is provided between the second

sectional casing chamber and a closed second end, opposite the first end, of the casing.

18. (New) A gas spring according to claim 12, wherein a gas-filled compensation chamber is provided between the second sectional casing chamber and a closed second end, opposite the first end, of the casing.

19. (New) An adjustable length gas spring, comprising

- a casing which has a central longitudinal axis and is filled with a pressure fluid;

- a guide and seal unit which closes the casing at a first end thereof;

- a piston rod which has an outer end and is extended through, and sealed towards, the guide and seal unit out of the first end of the casing, the piston rod being extendible relative to the casing;

- a first fastening element mounted on the outer end of the piston rod;

- a second fastening element mounted on a closed second end of the casing;

- a piston which is guided in, and sealed towards, the casing and connected with the piston rod;

- a first sectional casing chamber which is formed between the piston and the guide and seal unit;
- a second sectional casing chamber which is defined by the piston and faces away from the first sectional casing chamber;
- a valve which is disposed in a vicinity of the piston for interconnection of the sectional casing chambers,
 - the valve having a valve pin, which is displaceable along the central longitudinal axis, for actuation of the valve from outside the casing; and
 - at least one spring element,
 - which is disposed between the piston and the first end of the casing,
 - which encircles the piston rod,
 - which supports itself on a side opposite the guide and seal unit, and
 - which springily counteracts any extension of the piston rod relative to the casing for at least part of a length of extension, whereas the at least one spring element is constructed such that with the valve being in an open position and with no external force acting between the fastening elements it is slightly compressed and with the valve being in an open position and with a tensile force

acting between the fastening elements it can additionally be compressed in the direction of extension.

20. (New) A gas spring according to claim 19, wherein the at least one spring element comprises at least one saucer spring.

21. (New) A gas spring according to claim 20, wherein the at least one saucer spring comprises an assembly of saucer springs.

22. (New) A gas spring according to claim 21, wherein the assembly of saucer springs is confined by an encapsulation.

23. (New) A gas spring according to claim 19, wherein the at least one spring element, upon extension of the piston rod, is supported towards the guide and seal unit in the direction of extension.

24. (New) A gas spring according to claim 23, wherein the at least one spring element is disposed in the first sectional casing chamber.

25. (New) A gas spring according to claim 19,
wherein the guide and seal unit is displaceable in the casing.

26. (New) A gas spring according to claim 25,
wherein displaceability of the guide and seal unit counter to
the direction of extension is defined by a stop.

27. (New) A gas spring according to claim 25,
wherein the at least one spring element is supported towards
the guide and seal unit counter to the direction of extension.

28. (New) A gas spring according to claim 19,
wherein an energy accumulator is provided between the second
sectional casing chamber and the closed second end, opposite
the first end, of the casing.

29. (New) A gas spring according to claim 19,
wherein a gas-filled compensation chamber is provided between
the second sectional casing chamber and the closed second end,
opposite the first end, of the casing.